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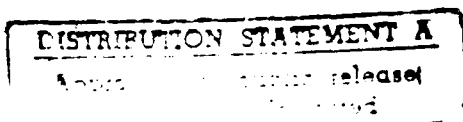
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LOGISTICS IMPLICATIONS  
OF MANEUVER WARFARE  
VOLUME 5: OPERATIONAL REFORM  
IN NATO

Report IR702R5

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## PREFACE

As part of its FY87 independent research and development program, the Logistics Management Institute (LMI) examined the logistics implications of a new maneuver-oriented operational concept — AirLand Battle — being adopted by the U.S. Army.

LMI undertook this study for three reasons. First, even though more than 5 years have passed since AirLand Battle was promulgated as formal Army doctrine, misperceptions and uncertainties about its execution still exist. Second, neither the Army nor the Defense community has yet developed a good understanding of the implications and ramifications of AirLand Battle. Third, and most important, the combat service support requirements, which largely determine the extent to which AirLand Battle doctrine can be executed, are not well defined or understood.

The results of this study are presented in six volumes. Volume 1, sets the stage for the examination of AirLand Battle doctrine and lays out the focus and scope of the study; Volume 2 reviews NATO's defense posture, including operational concepts and capabilities; Volume 3 describes the military command structure, operational concepts, and capabilities of the Soviet Union; Volume 4 summarizes the various arms control negotiations that have taken place between East and West to solve NATO's security problem peacefully; this volume, Volume 5, illustrates the need for NATO to shift toward a maneuver-oriented defense concept, analogous to AirLand Battle doctrine, if it is to maintain a credible conventional defense; and Volume 6 details the specific logistics improvements that are required to support maneuver defense in a NATO environment. The material in these volumes is interrelated so the reader is cautioned not to interpret individual volumes as stand-alone documents.

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## **LOGISTICS IMPLICATIONS OF MANEUVER WARFARE**

### **VOLUME 5: OPERATIONAL REFORM IN NATO**

This volume uses plausible war scenarios to identify and describe the operational-tactical reforms that are needed to improve NATO's defense posture. These scenarios are plausible because they have been derived from what we believe are realistic assessments of the conditions and military capabilities of the two sides as described at some length in the preceding four volumes of this report.

We begin this volume by recapitulating the principal assumptions that determine the nature of the Soviet offensive and describe the characteristics of the scenarios that are implied. Then, we identify the key weaknesses of the NATO defense posture and its tactical doctrine in countering the Soviet threat. Finally, we outline a maneuver-oriented defense concept for NATO that is suited to defeating that threat.

#### **ASSUMPTIONS AND PLAUSIBLE SCENARIOS**

##### **Strategic Objectives**

The strategic objectives of the Soviet Union in Europe include the disintegration of NATO and the expulsion of U.S. Armed Forces. It has sought to achieve those objectives by "peaceful means" or through intimidation, but probably would not refrain from military aggression if it is convinced that the risks entailed can be controlled and the success of a military offensive can be assured. It has worked patiently and systematically to create the conditions necessary to satisfy these prerequisites for a military option.

Among the major Soviet accomplishments in moving toward their strategic objectives are the following:

- Achievement of approximate strategic parity with the United States
- A shift from the deep battle concepts of the World War II era into a more aggressive and larger scale concept of Operational Mobile Groups (OMGs),

until recently referred to in the West as Operational Maneuver Groups, whose missions are to exploit penetrations of NATO's forward defenses

- Establishment of a wartime centralized command and control structure for the entire operation against NATO's Central Region under the Commander-in-Chief (CINC) Western TVD (corresponds to theater of operations), who would be responsible for the coordination of air, sea, and land operations in executing the strategic-operational plan approved by the Supreme High Command (*Stavka VGK* in Russian) in Moscow
- Pursuit of a policy of detente or "friendly coexistence" to reduce vigilance and defense preparedness in NATO, including agreements to a variety of "confidence and security building measures" proposed by the West
- Elimination of the theater-nuclear escalatory option of NATO through the Intermediate Nuclear Forces Treaty
- Steady modernization of the Soviet armed forces over the past 15 years that has produced dramatic improvements in operational capabilities, readiness, and sustainability.

### Prospects of War

How the Soviet leadership perceives the present "correlation of forces" between Warsaw Pact and NATO can only be answered by the Main Military Council, the peacetime equivalent of *Stavka VGK*, chaired by General Secretary Mikhail Gorbachev. The indications are, however, that their perception is one of continued inadequacy in spite of the strategic accomplishments listed above, creating a lack of confidence in any military option against the West. For example, the initiatives of Gorbachev since his ascent to power in March 1985 clearly reflect his view, shared by much of the civilian and military leadership, that only a *revitalized* Soviet Union can hope to accomplish its strategic aims. His initiatives are essentially threefold.<sup>1</sup> First, "restructuring" is designed to revitalize the bankrupt Soviet economy, to modernize its industrially backward plant and infrastructure, to reorganize the agricultural sector, and to return the Communist Party to a position of supremacy. Second, "openness" and "democratization" are designed as means to this goal of restructuring by changing the political culture and reorienting the state's

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<sup>1</sup>For an overview of these initiatives, see the October 1988 issue of *Current History* (Vol. 87, No. 531). Although Western assessment of the sincerity and direction of these initiatives varies, the articles in this issue suggest they are sincere attempts by Gorbachev to foster fundamental changes rather than a public relations exercise exclusively aimed at reshaping Western perceptions of the Soviet Union.

propaganda machine. Domestically, these changes are meant to implant in people's minds the belief that real changes and higher standards of living are pending; internationally, their purpose is to dramatize the "process of democratization" in order to foster Western support in the form of loans and technology transfer to facilitate Soviet modernization plans. Third, "new thinking" is being promoted to extend the notion of "peaceful coexistence" articulated by his predecessors since 1956. This includes a new emphasis on "denuclearization" that is designed as an arms control negotiating tactic to reduce if not eliminate NATO's nuclear options, to play upon the *angst* of nuclear weapons in the West to gain a negotiating advantage, to exploit the visible cracks within the Western Alliance, and to create the conditions that may ultimately lead to the withdrawal of American forces from the European continent. After the theater nuclear weapons are removed, it is a foregone conclusion, according to most observers in the West, that the United States will withdraw its forward deployed forces from Western Europe, regardless of the status of negotiations under the Conventional Stability Talks that are planned to get underway in 1989.

Western observers generally anticipate three possible alternative outcomes for the reforms resulting from Gorbachev's initiatives.<sup>2</sup> If the reforms are successful, this would mean an economically and militarily rejuvenated and modernized Soviet Union. If the reforms result in instability and chaos, Gorbachev will be replaced by a hard-line Stalinist-type leadership. If the reforms remain stalled by an inflexible and entrenched system, the result would be decades of continued stalemate and a stagnating, inward-looking Soviet Union faced with ever-declining influence on the world scene and ultimate decomposition. Some political scientists believe the last hypothesis, which they deem most favorable to the West, is the most probable one; others give even odds to the first two hypotheses; and some historians believe the first is most probable, given the substantial and irreversible changes that have already taken place in the Soviet Union since the 1950s.<sup>3</sup>

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<sup>2</sup>See, for example, George Urban, "Should We Help Gorbachev?" *World Today*, Feb 1988, pp. 19–20; also, Alain Besançon, "Gorbachev Without Illusions," *Commentary*, Apr 1988, pp. 47–57. Both authors project continued stagnation of the Soviet Union as the most probable scenario unless the West, unwisely, comes to the rescue by providing the means for the Soviet regime's survival.

<sup>3</sup>For a noted authority on Soviet history who supports the latter view, see Moshe Lewin, *The Gorbachev Phenomenon* (Berkeley, Calif.: University of California Press, 1988).

We assume for the purposes of this study that either one of the first two hypotheses will occur; i.e., either a rejuvenated Soviet Union or one that reverts to Stalinist rule. Both, especially the former, have the potential to raise the prospect of war in our judgment. A prosperous, self-confident Soviet Union vying to overtake the United States in economic, social, and political strength is more likely to resolve the recurring diplomatic deadlocks by fighting. A stagnant, paranoid Soviet Union under Stalinist rule is more likely to revert to war as a means of diverting attention from mounting discontent and of suppressing growing revolutionary movements within the country or among its East-European satellites.

In his remarkable and widely cited analysis of the phenomenon of war, Geoffrey Blainey exposes as myths the notion that increasing contacts between nations through travel and trade will necessarily dispel prejudice and strongly promote peace, and the belief that a nation busily engaged in economic growth has no spare energy or time for waging war.<sup>4</sup> He concludes his analysis of the causes of war by setting forth the following framework:

In their origins, war and peace are not polar opposites, and the distinction between a warmaker and a peacemaker is often a mirage. . . . While the breakdown of diplomacy reflects the belief of each nation that it will gain more by fighting than by negotiating, the breakdown of war reflects the belief of each nation that it will gain more by negotiating than fighting. . . . War and peace appear to share the same framework of causes. . . . When leaders of rival nations have to decide whether to begin, continue or end a war, they are, consciously or unconsciously, asking variations of the same question: they are assessing their ability or inability to impose their will on the rival nation.

In deciding for war or peace national leaders appear to be strongly influenced by at least seven factors:

- (1) military strength and the ability to apply that strength efficiently in the likely theater of war
- (2) predictions of how outside nations will behave if war should occur
- (3) perceptions of whether there is internal unity or discord in their land and in the land of the enemy
- (4) knowledge or forgetfulness of the realities and sufferings of war
- (5) nationalism and ideology

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<sup>4</sup>Geoffrey Blainey, *The Causes of War* [New York: The Free Press, 1988 (3rd edition, first American edition)].



- (6) the state of the economy and also its ability to sustain the kind of war envisaged
- (7) the personality and experience of those who shared in the decision

Wars usually begin when two nations disagree on their relative strength, and wars usually cease when the fighting nations agree on their relative strength. Agreement or disagreement emerges from the shuffling of the same set of factors. Thus each factor is capable of promoting war or peace. A change in one factor may dramatically alter a nation's assessment of its bargaining position. In the short term that factor could wield an influence which seems irrationally large.

When nations prepare to fight one another, they have contradictory expectations of the likely duration and outcome of the war. When those predictions, however, cease to be contradictory, the war is almost certain to end. Any factor which increases the likelihood that nations will agree on their relative power is a potential cause of peace. One powerful cause of peace is a decisive war, for war provides the most widely-accepted measure of power. [But] even a decisive war cannot have permanent influence, for victory is invariably a wasting asset.<sup>5</sup>

With regard to the prospects of war in the nuclear era, he concludes as follows:

The long period of peace between the superpowers is not primarily the result of the nuclear terror, but nuclear fears will be increasingly important if that peace is to be considerably prolonged. Whereas a forty-year peace is not unique, a eighty-year peace will require the presence of unusual peacemaking factors. The nuclear era seems to follow the same basic rule of earlier eras: peace will prevail if nations believe they lose more than they gain by resolving their disagreements through fighting.<sup>6</sup>

### **Soviet Operational Plan**

In keeping with Blainey's analysis, we assume in developing the scenario that the Soviets would continue to perfect their deep operations capability through force restructuring, training, and equipment modernization until they arrive at the conclusion, sometime in the 1990s, that a military option to achieve their strategic aim is within reach. We also assume that other internal Soviet-political factors will influence their decision to go to war, whatever the particular circumstances may be. They would launch their military offensive relying on maximum surprise and speed in order to win the war before NATO has completed its defense preparations and rapid reinforcements. Such a "preemptive victory" is, in their view, the only way to

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<sup>5</sup>Geoffrey Blainey, *op. cit.*, pp. 292 – 294.

<sup>6</sup>Geoffrey Blainey, *op. cit.*, p. 295.

keep nuclear escalatory risks controllable. The Soviets are apparently convinced that in the face of a *fait accompli*, the United States would prefer to accept "uncoupling" to the alternative of full-scale nuclear war. Thus, their strategic-operational plan would be a rapid offensive with *limited* objectives designed to disintegrate NATO's coherence in the Central Region without a total war. The immediate objectives would be to control the Danish Straits by the third day after invasion (D + 3) and the Rhine River by D + 5. The subsequent objective would be to occupy the North Sea coast and ports in The Netherlands and Belgium by D + 10. At that point, the Soviets would immediately sue for a "peaceful" settlement, bargaining away their capability to inflict further devastation and to resist eventual defeat for a considerable time in exchange for NATO's concession of Soviet political aims. Their expectation is that NATO members, disagreeing about continuing the war, would concede by default; but if NATO is not prepared to accept the terms offered, then the Soviets would continue with their offensive, converting the limited war into a total war in Europe that would remain conventional only as long as NATO does not make visible preparations for nuclear escalation.

Given the choice between a "bolt-from-the-blue" attack and a 60-day mobilization to develop maximum combat power, the Soviets would opt for a short mobilization effort to keep strategic warning to a minimum. Since a 7- to 10-day preparation effort would present the most dangerous situation for NATO, we assume this would be their choice. The mobilization turbulence and forward movement of forces could be partly concealed with the biannual rotation of personnel to and from Groups of Soviet Forces in Eastern Europe, during which roughly 100,000 personnel are moved in both directions every spring and fall. Surplus movements of personnel and materiel could partly be concealed by combining the preparation efforts with announced maneuver exercises. Deployment to assembly areas could proceed in full compliance with the "Helsinki Accord" as an alert exercise not requiring prior notification.

### **Order of Battle**

Throughout the remainder of this report, we take the current force posture of each side and apply it to this future scenario. We assume that the CINC Western TVD would adopt the following order of battle: three Fronts opposite AFCENT (Allied Forces Central Europe) and one Front for the joint operation against Denmark, consisting of a land/airborne component against Schleswig-Holstein and

Jutland and a navy/amphibious component against Zealand and the other Danish Isles. This first strategic echelon would be backed by a second-echelon Front assembled in Western Poland and a third-echelon reserve in the Western Military Districts of the Soviet Union. Those second- and third-echelon Fronts would provide rear-area security and protection. Contrary to popular opinion, they would not be used to reinforce the first-echelon Fronts: the operation is keyed to surprise and speed, which would be infeasible if victory depended on any follow-on echelon Fronts.

Because a Front is a wartime, not peacetime, formation, we are uncertain about its composition. Viktor Suvorov<sup>7</sup> asserts that a strict geometry holds, with the first-echelon Fronts (except the Baltic Front) consisting of one Tank Army composed of four Tank Divisions and two All-Arms Armies each composed of four Motor Rifle Divisions plus one Tank Division. As a result, a Front would consist of six Tank Divisions plus eight Motor Rifle Divisions. In contrast, David Ishby<sup>8</sup> asserts both Front and Army are flexible formations: a Front consists of three to five Armies, comprising one or two Tank Armies and three or four All-Arms Armies; an Army consists of four to five divisions, with a Tank Army comprising three or four Tank Divisions plus one Motor Rifle Division, and an All-Arms Army comprising one or two Tank Divisions plus two or three Motor Rifle Divisions. Thus, a Front could be comprised of 12 to 20 divisions. As a result of the restructuring of Soviet ground forces since the late 1970s, we assume that Ishby's analysis is accurate.

Under a short mobilization scenario of 10 days, Table 1 shows the maximum force that the Warsaw Pact can generate for the Western TVD. The first strategic echelon has 50 divisions against AFCENT and 8 against Denmark; the second strategic echelon is a large force, but 11 of the 21 divisions shown are Category 3 and would not be fully combat ready for at least 60 days. If those units must fight within 3 weeks after mobilization, their combat effectiveness would be at most 60 percent, so the second echelon equates to roughly 16 divisions. We assume that the Fronts opposite AFCENT (the two Western Fronts located in East Germany and the Central Front located in Czechoslovakia) would distribute their forces in two echelons in a balanced way. Although this does not agree with the contemporary Soviet strategy

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<sup>7</sup>Viktor (pseudonym) Suvorov, *Inside The Soviet Army* (New York: Macmillan Publishing Co., 1982). (This author is a Russian officer who defected to the West in the 1970s.)

<sup>8</sup>David C. Ishby, *Weapons and Tactics of the Soviet Army* (New York: Jane's Publishing Inc., 1981).

**TABLE 1**  
**WESTERN TVD ORDER OF BATTLE**  
**(Ground Maneuver Forces)**

Front/echelon	Composition <sup>a</sup>	Comments
1st echelon	2nd Guards Army = 1 TD + 3 MRD 5 (NVA) Army = 1 TD + 4 MRD	Combat ready Mobilization of 2 MRDs, 96 hours
2nd echelon	20th Guards Army = 3 TD + 1 MRD 3rd Shock Army = 3 TD + 1 MRD	Combat ready 1 MRD transferred from 1st Guards Tank Army
1st Western Front	Reserve = 1 TD	In peacetime under 3rd Shock Army
	Total: 18 divisions = 9 TD + 9 MRD	Also: 1 AB Division, 1 AA brigade, and CS/CSS
1st echelon	8th Guards Army = 1 TD + 3 MRD 3 (NVA) Army = 1 TD + 4 MRD	Combat ready Mobilization of 2 MRDs, 96 hours
2nd echelon	1st Guards Tank Army = 3 TD + 1 MRD 28th Shock Army = 3 TD + 1 MRD	2 TDs transferred from NGF (Poland) Entire army deployed from Belorussian MD
2nd Western Front	Reserve	TD from 1st Guards Tank Army
	Total: 17 divisions = 8 TD + 9 MRD	Also: 1 AB Division, 1 AA brigade, and CS/CSS
1st echelon	1 (CVA) Army = 1 TD + 3 MRD Undesignated CGF Army = 1 TD + 3 MRD	Combat ready 1 MRD transferred from Carpathian MD
2nd echelon	4 (CVA) Army = 2 TD + 1 MRD Undesignated CGF Army = 3 TD + 1 MRD	All Category 2 units 2 TDs transferred from GSF Hungary
Central Front	Total: 15 divisions = 7 TD + 8 MRD	TD in 2nd echelon is reserve
Sea component	Amphibious assault force: 1 Spetsnaz brigade, 1 Polish marine infantry division, 1 Soviet naval infantry brigade	21 landing ships, dozens of air cushion assault vehicles, supported by Baltic, GDR, and Polish fleets
Land component	1 Airborne division Undesignated Army = 2 TD + 4 MRD echeloned for narrow (50 km) space	Drop in North Jutland; combat ready. All Category 1/Category 2 units from Baltic MD, reinforced with 2 artillery divisions
Baltic Front	Total: 8 division equivalent	1 additional AB Division as backup
1st echelon	Undesignated (PVA) Army = 4 TD Undesignated (PVA) Army = 1 TD + 3 MRD 4th Guards Tank Army = 4 TD	Combat ready Combat ready Depleted/reconstituted from Category 3 units in Belorussian MD
2nd echelon	Undesignated Army = 4 TD + 1 MRD Undesignated Army = 3 TD + 1 MRD	From Carpathian MD (2 TDs are Category 3) From Belorussian MD (all TDs are Category 3)
2nd Echelon Front (Poland)	Total: 21 divisions = 16 TD + 5 MRD	Large but second-rate force, old equipment, not combat ready before M + 60 days

Source: LMI Report IR702R3, *Logistics Implications of Maneuver Warfare, Volume 3: Soviet Offensive Concepts and Capabilities*, Frans Nauta, Oct. 1988.

Note: AA = air assault; AB = airborne; CS = combat support; CSS = combat service support; CGF = Central Group of (Soviet) Forces; CVA = Czechoslovak People's Army; GDR = German Democratic Republic; GSF = Group of Soviet Forces; MD = Military District in USSR; MRD = Motor Rifle Division; NGF = Northern Group of (Soviet) Forces; NVA = National (GDR) People's Army; PVA = Polish People's Army; TD = Tank Division. For Categories 1, 2, and 3 see explanation in Volume 3 of this report.

<sup>a</sup> A Tank Division consists of 3 Tank Regiments and 1 Motor Rifle Regiment; the combat strength is 1,000 officers and 8,000 enlisted personnel, 325 main battle tanks, and 180 armored fighting vehicles (AFVs). A Motor Rifle Division consists of 1 Tank Regiment plus 3 Motor Rifle Regiments, the combat strength is 1,180 officers and 11,750 enlisted personnel, 270 main battle tanks, and 300 AFVs.

Either division comprises 16 maneuver battalions (pure tank or AFV) and heavy combat support elements. The basic difference is that motor rifle units make the breakthrough, tank units exploit it. TDs are used in first echelon only against weak enemy or if fire destruction has neutralized his defense. Normally, combined arms armies have two MRDs in first echelon, with at least one MRD in second echelon.

of maximum force in the first-echelon armies along the broadest front, it is the result of space constraints. Table 1 may present overestimates of the extent of such constraints. For example, it is conceivable that the two Western Fronts, in view of the increased emphasis on preemptive raiding and the doctrinal norm of two-thirds of the force in the first echelon, could manage deploying up to 24 divisions (instead of 18) in their first-echelon armies, with the second echelon reduced from 16 to 10 divisions. The three Fronts opposite AFCENT would then have 32 divisions in the first echelon.<sup>9</sup>

Of the 50 maneuver divisions opposite AFCENT, 33 are Soviet and 17 are Non-Soviet Warsaw Pact (NSWP) ground forces. Their distribution among Fronts, Armies, and echelons shown in Table 1 is more or less arbitrary and intended only for illustration. In actuality, the NSWP forces probably would be distributed in a different way based on their perceived fighting value, nationality of opposite NATO corps sector, and other factors; for example, they might be used primarily as fixing forces opposite the German and U.S. corps sectors. Importantly, the popular notion that NSWP nations might balk at participating in a Soviet offensive against the West may be flawed. The Soviet Union has imposed mobilization statutes on its Warsaw Pact "allies" that permit mobilization of their forces without prior consultation with the governments of those countries. The NSWP forces are fully integrated with the Red Army, with the same doctrine, tactics, and procedures; and their combat equipment exhibits a much greater degree of standardization and interoperability than that achieved by NATO forces.

### Preparation Phase

The prewar period, in the Soviet lexicon, is subdivided into the time when normal peacetime readiness is maintained and the crisis period immediately preceding the outbreak of war. Soviet military art, since the 1970s, asserts that the time for tactical preparations for the transition to war is not the crisis period but rather the normal peacetime readiness period. This assertion is based on the notion that the initial phase of a contemporary war will be shorter and more decisive than in the past due to the increased lethality of the modern battlefield. As a result, the

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<sup>9</sup>Terrain analysis by military observers suggests that the region would support "well over 30 divisions in the first echelon." See Colonel John R. Landry, *et al.*, "Deep Attack in Defense of Central Europe: Implications for Strategy and Doctrine," Chapter 3, *Essays on Strategy* (Washington, D.C.: National Defense University, Nov 1984).

Soviet Union maintains all forward deployed forces at full combat readiness, which permits it to deploy the 50 divisions, specifically the critical first-echelon Fronts, within 10 days. For example, only 11 divisions would need to be moved by rail from Western Military Districts in the Soviet Union, 2 divisions from Poland, and 2 divisions from Hungary. (The subsequent assembly of the second strategic echelon would require transporting 13 divisions by rail once the offensive has begun.)

Other Warsaw Pact preparations include the dispersal of tactical air. In wartime, tactical fighter aircraft would not return to the 45 major bases in Eastern Europe but would be dispersed in groups of 4 to 12 aircraft operating from highway sections. Another important preparation would be the covert infiltration of *Spetsnaz* teams into Western Europe to conduct sabotage at the start of hostilities, especially against electric power plants, oil/gas storage facilities, and transportation choke points; "political-military (assassinations) missions;" and destruction of critical military targets such as nuclear sites, communications nodes, and radar facilities. The overall objective of the *Spetsnaz* teams would be to create paralysis at the outset on D-Day. As described in Volume 3, the Western TVD may deploy up to 11,000 *Spetsnaz* troops (excluding intelligence units), including one regiment (800 men) under direct command of CINC Western TVD; one brigade (1,000 men) per Front; and one company (155 men) per Army. These troops would be deployed as 700 to 900 independently operating teams, possibly supported by Soviet "sleepers" in Western Europe, whose number in the Federal Republic of Germany (FRG) alone has been estimated at 20,000.

At some stage during this crisis period, we assume that NATO member-nations would mobilize, either individually or collectively, in response to intelligence indications about Soviet activities or in response to crisis conditions that have triggered those activities. The resulting NATO buildup in AFCENT is shown in Table 2. For example, if NATO collectively lags Soviet preparations by 6 days, which may be a conservative estimate, then the forward defense force in AFCENT would grow from 24 divisions at NATO Mobilization (M)-Day to 28 divisions at M+4. All of those divisions would still be preparing their defense positions at the time the Soviet attack gets underway (Soviet D-Day equals NATO M+4).

**TABLE 2**  
**NATO BUILDUP IN AFCENT**  
**(Ground Maneuver Forces)**

Sector <sup>a</sup>	M		M + 10		M + 20		M + 30	
	Div	Bde	Div	Bde	Div	Bde	Div	Bde
<b>NORTHAG</b>	7 4/3	2	14	5	14	11	15	14
<b>CENTAG</b>	13 1/3	5	18	6	20	7	21	15
<b>AFCENT Reserve</b>	0	0	0	0	1	1	4	4
<b>Total division equivalent</b>	24		35 2/3		41 1/3		51	

*Source:* LMI Report IR702R2, *Logistics Implications of Maneuver Warfare, Volume 2: NATO Defense Concepts and Capabilities*, Frans Nauta, Sep 1988.

*Note:* Bde = Brigade; CENTAG = Central Army Group; Div = Division; NORTHAG = Northern Army Group.

<sup>a</sup> Ground forces for the defense of Schleswig-Holstein and Denmark are under command of Allied Forces Northern Europe, not included in the table. Their strength amounts to 2 division equivalents at M-Day, 3 at M + 10, 4 at M + 20, and 6 at M + 30.

## Initial Phase

The Soviets subdivide wartime into the "beginning period" and the "concluding period." As stated earlier, the Soviets are convinced this operation must achieve victory in the initial phase to be successful; i.e., their operational plan does not foresee a concluding period with mopping-up operations by follow-on Fronts, but a favorable settlement at Soviet terms once the first-echelon Front units achieve their objectives.

D-Day would start with the air operation, as outlined in Volume 3, and result in airbase and runway damage estimated as high as 40 percent for the 35 main and 35 secondary airbases in NATO's Central Region. By establishing secure corridors through the ground-based air defense belts in AFCENT, Warsaw Pact air forces would receive little attrition from the ground so that the air operation would most likely involve a massive air battle. We assume the plan would be to establish six corridors across AFCENT, two per Front, for bombing raids into NATO's rear followed by airborne drops. The approximate scale of the air operation is illustrated in Table 3 (those data are a few years old). Notice that Table 3 is concerned only with the Soviet air operation in the Western TVD and consequently excludes large

numbers of tactical aircraft such as NSWP tactical air (close to 1,400 combat aircraft), fighter-interceptors for the Counter-Air (air defense) operation (close to 4,000 aircraft), and naval strike aircraft that would support the Western TVD (close to 400 aircraft). A more comprehensive illustration of the present tactical air balance between the two sides is provided in Table 4. According to Major General Hartmut Gölzow, FRG, *Luftwaffe* Chief of Staff, the Soviets have demonstrated they can turn their combat aircraft around three times in a 6-hour period, which means that their sortie-generation capability on the first day may be on the order of 8,000 to 12,000 sorties for the air operation. Although NATO's offensive Counter-Air operation is designed to inflict heavy attrition, its effectiveness is limited in two ways. Against enemy aircraft, the technology available does not permit certain identification of hostile aircraft beyond visual range or at night. The result may be as many NATO as enemy kills. NATO could destroy all enemy airbases, but that would not materially affect enemy fighter sortie rates because of the Soviet operational concept of dispersed operations; bomber sortie rates, however, would be affected. NATO's defensive Counter-Air capability exhibits many weaknesses that have been covered in Volume 3.

After the air operation starts, our scenario assumes that the three Fronts opposite AFCENT would advance simultaneously, with the forward detachments of first-echelon divisions crossing the border within 2 hours. The main thrust would be near the seam between the Belgian and UK sectors, with secondary thrusts at the AFCENT flanks; a fixing force would probably be established opposite the most combat ready and trained forces, the German and U.S. corps zones (see Figure 1). After the advance of the first Western Front, the land component of the Baltic Front would then have room to start its advance by D+1 into Schleswig-Holstein, simultaneously with airborne and amphibious landings in Jutland and Zealand. The outcome of that particular operation should be a rapid victory by the Warsaw Pact forces. Occupation of Denmark is a high-priority objective of CINC Western TVD because it protects the flank of the operation against AFCENT, provides control of the Danish Straits needed for deployment and support of Baltic Fleet, and provides a base for contingency operations against Southern Norway in coordination with Northwestern TVD.



TABLE 3

## FIRST WAVE OF THE SOVIET AIR OPERATION IN WESTERN TVD

Air unit	Total aircraft	Aircraft available	Nuclear withhold	First mass strike
<b>Frontal aviation</b>				
Fighters	405	351	27	324
Fighter-bombers	315	273	21	252
Bombers	30	24	7	17
Recon/ECM	91	77	—	77
<b>Legnica Air Army</b>				
Fighters	135	117	9	108
Bombers	180	144	43	101
Recon/ECM	39	33	—	33
<b>Smolensk Air Army</b>				
Bombers	390	312	94	218
Recon/ECM	120	96	—	96
<b>Total</b>	<b>1,705</b>	<b>1,427</b>	<b>201</b>	<b>1,226</b>

Source: DoD briefing at NATO Conference in Bonn, FRG, June 1984.

Note: Recon/ECM: Reconnaissance/Electronic Countermeasures.

## Outcome

The outcome in AFCENT, most likely, would be a rapid collapse of NATO's defenses. The limited mobilization and defense preparation time available to NATO in this scenario would result in a weak forward defense that the first-echelon armies could easily penetrate with forward detachments and division-sized OMGs on the selected axes. The resulting encirclement of forward defense units, combined with Soviet raiding missions further into NATO's rear, would then soon crumble NATO's defense. Even if some elements of the Soviet operational plan fail (such as airborne drops in NATO's rear to seize objectives to facilitate the advance), the advance by the main force after annihilation of NATO's forward divisions would be unstoppable.

TABLE 4

## THE TACTICAL AIR BALANCE IN THE CENTRAL REGION

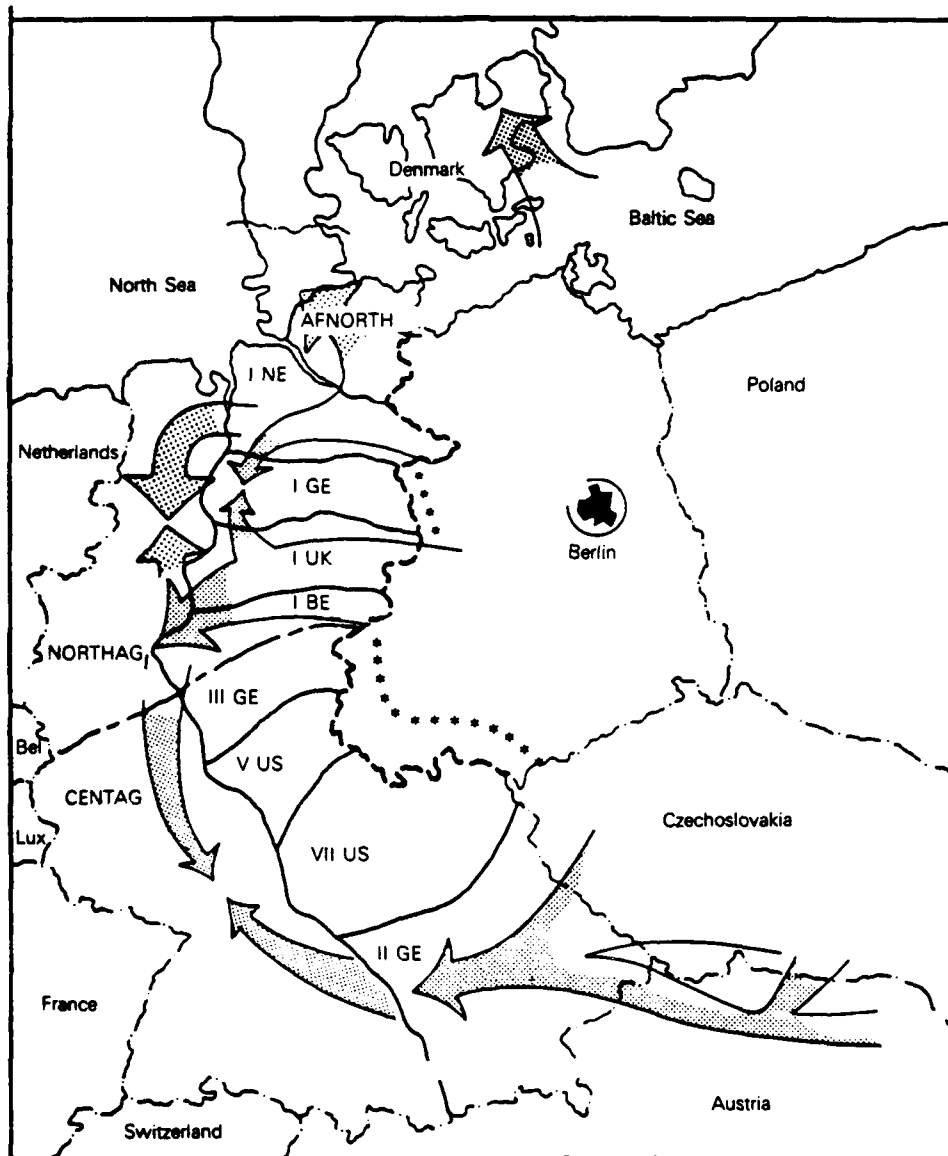
Warsaw Pact: Western TVD					NATO: Central Region								
Source	Aircraft available at Soviet M + 10				Source	Aircraft available at NATO M-Day				Aircraft available at NATO M + 10 <sup>a</sup>			
	FGA	F	R/ECM	B		FGA	F	R/ECM	B	FGA	F	R/ECM	B
Air Forces of GSFG	360	315	60	0	United States	440	215	42	0	914	599	60	80
Air Forces of CGF	45	45	15	0	Belgium	86	36	19	0	86	36	19	0
Baltic, Belorussian, and Carpathian MDs	270	360	85	0	Canada	36	0	0	0	60	0	0	0
Czechoslovakian AF	170	270	45	0	Denmark	34	34	18	0	34	34	18	0
GDR AF	60	270	12	0	France	133	15	85	60	133	72	85	60
Polish AF	225	360	35	0	FRG	369	72	72	0	407	72	72	0
Baltic Fleet Aviation	50	0	25	100	The Netherlands	110	56	19	0	110	70	19	0
Legnica Air Army	0	0	0	225	United Kingdom	99	120	24	108	114	150	24	129
Smolensk Air Army <sup>b</sup>	0	0	0	400									
Aviation of Air Defense	0	540	0	0									
Total	1,180	2,160	277	725		1,307	568	279	168	1,858	1,023	297	269

**Source:** Author's compilation from source data in *The Military Balance 1988 - 1989* (London: The Institute for Strategic Studies, Fall 1988). The table includes only units earmarked for the Central Region so that the actual numbers will change with redeployments from/to other regions or theaters. The table excludes long-range strategic bombers, training aircraft that could possibly be converted to operational missions, aircraft dedicated to electronic warfare missions, and helicopters. On NATO's side, it also excludes naval aviation. Dual-role fighter/attack aircraft have been counted in the FGA category unless they belong to an air defense unit. As a result of modern weapons and munitions, the distinction between certain ground attack fighters and bombers has become less clear; e.g., the F-111E, F-111F, and Tornado GR-1 with area attack weapon (MW-1) are classified as ground attack fighters but act very much like precision bombers.

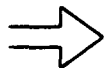
**Note:** AF = Air Force; B = Bomber; CGF = Central Group of (Soviet) Forces; F = Fighter; FGA = Fighter, Ground Attack; GDR = German Democratic Republic; GSFG = Group of Soviet Forces in Germany; MD = Military District; R/ECM = Reconnaissance/Electronic Countermeasures.

<sup>a</sup> NATO reinforcements reflect national commitments as well as conversion of aircraft in "operational conversion units" that can readily be converted from weapons system training to operational missions. The U.S. Air Force numbers are author's estimates reflecting the NATO commitment of an additional 37 tactical air squadrons (assumed to consist of 15 A-10, 9 F-15, 7 F-16, and 6 F-4 squadrons) to which have been added 1 RF-4 squadron, 3 FB-111 squadrons, and 1 F-117 squadron. In contrast, other public estimates assume reinforcements by up to 60 squadrons from the United States.

<sup>b</sup> The Smolensk Air Army is part of the Central Reserve supporting all TVDs, not just the Western TVD. It comprises, however, midrange bombers, not strategic bombers like the Moscow Air Army (not shown in table). Western estimates typically put the number of bombers available to Western TVD at 600 rather than the 725 shown in this table.



\*\*\*\*\* Fixing forces



"Operational direction" of ground-maneuver and airborne assault units

**Source:** Christopher N. Donnelly and Phillip A. Petersen, "Soviet Strategists Target Denmark," *International Defense Review*, No. 8/1986, p. 1,051.

**Note:** National corps sectors in AFCENT: NE = Netherlands, GD = (West) Germany, BE = Belgium, UK = United Kingdom, US = United States.

**FIG. 1. PLAUSIBLE SCENARIO FOR SOVIET OPERATION IN WESTERN TVD**

The reasons why this outcome appears more likely than the more favorable scenario popularized by retired General Sir John Hackett and his colleagues include the following:<sup>10</sup>

- Mobilization time of 4 days available to NATO instead of 14 days assumed by General Hackett.
- Warsaw Pact first strategic echelon consisting of 50 divisions opposite AFCENT instead of 40 divisions.
- A scenario geared to greater speed and further depth of the offensive: the Soviets probably would seek to occupy both Rotterdam [primary port of debarkation for the NORTHAG Line of Communications (LOC)] and Antwerp (primary port of debarkation for the CENTAG LOC) by D+10 rather than reaching Rotterdam by D+7 and aiming at a "voluntary stopline" along the Rhine and Waal rivers.
- A Soviet plan that seeks immediate encirclement of NATO's forward defenses rather than trying to outflank CENTAG by a delayed offensive in southern direction on the West bank of the Rhine River starting not earlier than D+7.
- A scenario in which ground force reinforcements from the United States are irrelevant to the outcome unless their equipment has been prestocked in-theater as opposed to General Hackett's scenario where the arrival of such reinforcements enables the Supreme Allied Commander Europe (SACEUR) to take the counteroffensive by D+10.
- A scenario that assumes the Soviet military force in Eastern Europe will be sufficient to protect their ground LOCs against sabotage rather than assuming that Polish resistance will hamper forward movement of supplies by rail and road.
- An appraisal of the technology of the two sides that is less optimistic about the presumed effectiveness of NATO antitank guided missiles against Soviet armor and about the putative advantages of NATO's superiority in electronics on the battlefield.

The outcome of this scenario is obviously unacceptable to the West, yet it is the most probable one under the stated assumptions. Moreover, Soviet confidence in the

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<sup>10</sup>General Sir John Hackett, *et al.*, *The Third World War - August 1985* (New York: Macmillan Publishing Co., 1979). This scenario depicts a conventional offensive against NATO in all three regions with the Soviets failing to achieve their objectives against AFCENT. A NORTHAG counteroffensive, starting at D+10, forces withdrawal of Soviet troops; negotiations between the United States and the Soviet Union begin after a limited nuclear exchange on city targets in Europe at D+16.

predictability of this outcome can only increase over the next few years if NATO's attention remains fixed on nuclear deterrence at the expense of conventional defense with the ironic result that NATO's deterrence will eventually vanish. There is, however, no reason to passively accept such a course of events. It is within NATO's means to field a credible defense against the type of threat outlined above, with no need to resort to nuclear weapons except in the unlikely event of Soviet commitment of its follow-on Fronts. To appreciate this point, let us first examine why NATO, in spite of defense expenditures that exceed those of the Warsaw Pact, is unprepared for this most plausible scenario.

### **NATO'S WEAKNESSES**

NATO's principal weakness does not stem so much from a shortage of forces, armaments, or trained military personnel, but from a mindset that is focused more on deterrence than on defense ("war will never happen") and, at most, is prepared for the wrong war. On the civilian (political) side of NATO, most European allies are unwilling to even consider the idea that deterrence might fail and, consequently, do not take defense preparedness seriously, but pretend to do so. On the military side, NATO's defense concept [our collective noun for Forward Defense, rapid reinforcement, allied tactical doctrines, and "operational subconcepts" such as Follow-On Forces Attack (FOFA) and Counter-Air] is geared to the most unlikely scenario for a Soviet attack.

First, it assumes a lengthy mobilization period, with all allies mobilizing simultaneously and with sufficient time to deploy forces to their General Defense Plan locations and to prepare defense barriers. This reliance on perfect intelligence and adequate strategic warning causes a complacency that affects peacetime force readiness. NATO Commanders do not even have the authority in peacetime to monitor the readiness of national forces committed to NATO (with some exceptions such as high- and medium-air defense missile systems and air defense interceptors).

Second, it assumes a linear battlefield (such as those employed in World War I), with divisions lined up on each side of the front line, swaying the forward edge of the battle area in one direction or another. The tactical battles in each sector are largely independent and are characterized by frontal attacks, matching strength against strength. Any bulges in the forward edge of the battle area could be rapidly pushed back by lateral transfers of uncommitted divisional reserves.

Third, it ignores or misreads Soviet operational concepts by assuming the first echelon would neither concentrate fire nor mass forces, but would attack on a broad front without maneuver in endless attrition battles. It further assumes the Soviets would squander their numeric superiority by stacking their ground forces in echelons one behind another. Such a strategy would permit NATO's forward defense to defeat them in piecemeal fashion. Rather, the Soviets would put the maximum combat power forward in the first-echelon armies, and commit their follow-on echelons only when the earlier ones have been exhausted.

Fourth, by focusing exclusively on the tactical battles at the frontline, it ignores the operational level of war at which the Soviets are acknowledged masters. It assumes that the frontline battles would determine the outcome of the war, forgetting that those battles are irrelevant once mobile groups have penetrated along a few main strike axes deep into NATO's rear.

Fifth, even ignoring Soviet penetrations, it assumes that NATO's forward defenses would be capable of grinding down the assault by fighting a sequence of battles in tactical depth (Active Defense) and by interdicting the enemy's reinforcements from follow-on echelons (FOFA) to keep the force ratio at the frontline to manageable proportions. Once the advance is thus stalled, NATO's ground maneuver forces would counterattack. The predicted success of Active Defense again assumes no concentrations of fire and troops by the Soviets to achieve breakthrough. The predicted success of FOFA to disrupt and delay, if not destroy, enemy follow-on echelons assumes no countermeasures by the opponent as well as his reliance on those echelons to win the first battle.<sup>11</sup>

Sixth, it assumes that NATO would not only win the air battle but would have air superiority over friendly territory. NATO's air forces can therefore provide offensive air support to NATO's forward defense while at the same time suppressing the enemy's support of its ground offensive. As a result, NATO's air superiority would compensate for any combat power deficiencies on the ground.

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<sup>11</sup>The emphasis of FOFA is on interdicting the second-echelon armies, if any, of the first-echelon Fronts and the follow-on reinforcement by second-echelon Front(s), i.e., approximately 110 kilometers beyond the forward line of own troops and deeper. Formally, however, the FOFA concept includes new weapons with a range of 50 to 800 km. For a good overview, see: U.S. Congress, Office of Technology Assessment, *Technologies for NATO's Follow-on Forces Attack Concept*, Special Report OTA-ISC-312 (Washington, D.C.: U.S. Government Printing Office, Jul 1986).

If all these assumptions proved to be true, NATO would be well prepared. It has qualitative advantages in military personnel and equipment that, under the above assumptions, might outweigh the quantitative disadvantages, given the advantage accruing to the defense in positional warfare — an advantage traditionally rated at a factor of 3:1. This assertion is backed up by detailed assessments produced via simulation models and by a growing coterie of political scientists posing as defense analysts who publish optimistic conclusions on the conventional force balance in Europe. Unfortunately, those assessments and models are flawed because they are based on the same six false assumptions listed above.<sup>12</sup>

The fallacy of these assumptions is apparently not recognized by those who would be faced directly with the consequences if NATO's resolve would ever be tested. Because the assumptions are wrong, they in effect identify NATO's weaknesses that the Soviets would seek to exploit in any operational plan. Specifically, these are the weaknesses:

- *Intelligence and Warning.* History continues to teach us that too much confidence in accurate intelligence and adequate strategic warning (i.e., convincing enough to act upon) is unwise. For example, the Soviet invasion of Czechoslovakia in 1968 came as a total surprise to the West; the October 1973 war came as a surprise to Israel, even though it had monitored the Egyptian buildup for months; and more recently, intelligence estimates of forward-deployed nuclear missile systems were wrong as the U.S. Government found out with the International Nuclear Forces Treaty.
- *Mobilization.* No alliance of sovereign nations has ever mobilized in lock-step. NATO nations would most likely mobilize at different times, and defense plans should take this into account, especially in NORTHAG.
- *Defense Preparations.* Preparing strong defense fortifications requires approximately 7 days after troops arrive at their General Defense Plans positions, but in all likelihood that time would not be available. Without it, the traditional advantage of the defense over the attack evaporates. Unless the needed barriers and terrain features are installed in peacetime, NATO cannot, and should not seek to, fight a positional defense.
- *Forward Defense.* It is a political necessity to defend forward, given the geography of the FRG. However, the lack of operational reserves until at least M+20 ensures that this concept would probably fail. A foe whose

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<sup>12</sup>For a scholarly essay critiquing the increasingly popular, optimistic force balance assessments, see Eliot A. Cohen, "Toward Better Net Assessment: Rethinking the European Conventional Balance," *International Security*, Vol. 13, No. 1, Summer 1988, pp. 50–89.

entire military doctrine can be summarized in the single notion of *rapid deep thrust* is a compelling reason for requiring a defense posture with strength in depth.

- *Active Defense.* Although each national army has its own tactical doctrine, each is compatible with NATO's "harmonized" doctrine of Active Defense. That doctrine is essentially a refinement of positional warfare that is about territory and attrition: defense is aimed at restricting the enemy's territorial gains while counterattack is aimed at regaining lost territory; both modes have the common goal of shifting the relative strengths of the opposing forces in the defender's favor through relentless attrition. The doctrine, however, is designed for the linear battlefield from a bygone era. It underestimates the "shock" created by the Soviet concept of "integrated fire destruction"; it concedes the initiative to the aggressor; and it offers no prospect of halting the Soviet advance. In executing that doctrine, NATO's forward battalions and brigades (if not encircled by Soviet penetrations) would fight delaying actions and phased withdrawals all the way back to the North Sea coast. This doctrine is obsolete and needs to be replaced by a superior doctrine of maneuver warfare that is not about territory but about disrupting enemy plans and placing maximum strength against enemy weak points through concentration and dispersion of friendly forces.
- *Operational Level of War.* The only effective response to an adversary who thinks operationally, rather than tactically, is to think likewise. This implies rejecting the notion of independent battles in national corps sectors; that is, NATO commanders must be assigned operational command and control, not just coordination, of national forces, and be provided with the resources (airpower and mobile reserves) to influence the outcome through operational-level maneuver. NATO defense planning, however, lacks a body of doctrine at the operational level, focuses more upon the transition from peace to war than on the prosecution of war, and exhibits no vision of Army Group campaign plans to achieve decisive results on the battlefield.
- *FOFA.* The desirability of interdicting follow-on echelons before they reach the main battle area in order to disrupt Soviet plans and to keep force ratios from escalating to unmanageable proportions is obvious. However, the current focus of FOFA is too deep: instead of the putative second strategic echelon (300 – 400 km from the inner-German border), the most important troop targets are the second-echelon divisions of first-echelon armies and the second-echelon armies (if any) of the first-echelon Fronts, i.e., within a distance of approximately 70 and 160 km, respectively, behind the forward line of enemy troops. Deep interdiction is a traditional air force mission that should not receive equal or higher priority than the more critical close battle. As noted earlier, a Soviet operational plan whose success depends on the commitment of a second-echelon Front is highly implausible.



- *Close Air Support/Battlefield Air Interdiction.* By Soviet calculations, about 50 percent of NATO's firepower consists of fixed-wing tactical air. With the exception of single-role offensive air support aircraft (such as the A-10 aircraft for close air support and the Harrier for battlefield air interdiction and tactical air reconnaissance), however, few tactical aircraft would be available to support ground forces during the first 3 days because allied air forces would be concentrated on the Counter-Air mission. Nevertheless, these same 3 days are also the most critical for the ground battle. Under current procedures, ground commanders cannot count on tactical aircraft to assure air support of a campaign plan or to turn a battle from being lost. NATO has a serious doctrinal problem with the integration of air and ground operations that remains to be resolved.
- *Air Superiority.* The notion of air superiority is unrealistic for this battlefield due to the massive capabilities of both sides. The most that can be realistically accomplished is the attainment of a temporary and local air advantage. Consequently, air superiority cannot be counted on to offset the deficit in ground forces.
- *Readiness.* Peacetime readiness of ground forces committed to NATO's defense is, by current policy, a national responsibility. Furthermore, NATO has never conducted an independent assessment of force readiness beyond the limited indications gleaned from annual exercises, and NATO commanders have neither a vote nor information on the readiness of forces they would command in wartime.
- *Sustainability.* Although Warsaw Pact's forward stockage of supplies is sufficient for 23 days, NATO's ammunition stocks would begin to run out after 14 days. NATO's capabilities to either repair battle-damaged equipment or replace it from war reserve stocks are very limited because those requirements have never been realistically addressed. The national transportation systems in each corps sector are geared to the planning assumptions of Active Defense and do not possess the flexibility and the capacity to support resupply requirements of combat forces operating out of sector. On all three counts – supply, maintenance, and transportation – the collection of separate national logistics systems in the Central Region would be taxed to support a positional defense and would be overextended if required to support a maneuver defense.
- *Rear Battle.* In the rear combat zone, combat service support units would be required to provide much of their own defense (supplementing whatever military police and territorial troops that may be available) against enemy units that penetrate into NATO's rear, but they are neither trained nor equipped to do so. The situation in the corps rear area is further complicated by the presence of different units of different Military Services and nationalities with different missions and operating procedures, all sharing the same ground with nobody in control, lacking communications

equipment, established communications networks, and an agreed allied doctrine for rear battle. The logical consequence would be chaos.

- *Rear Area Protection.* By NATO policy, rear area protection in the Communications Zone is a host-nation responsibility. For the most part, however, nations and NATO alike have ignored this mission because "penetrations won't happen." Yet, security of the LOCs is probably the single most important issue of any war. Enemy interdiction of AFCENT's ground LOCs would ensure NATO's defeat.

None of the above weaknesses is addressed by NATO's Conventional Defense Improvements Initiative. Yet, they are more important than the force and equipment modernizations addressed by that initiative. Resolving these weaknesses represents a formidable task that will entail fundamental changes. In the balance of this volume, we outline what needs to be done to resolve some of these weaknesses. The last three weaknesses – sustainability, rear battle, and rear area protection – are of such magnitude that we defer discussion on these issues to Volume 6.

## CONCEPT FOR CREDIBLE DEFENSE

The sheer complexity of formulating and developing a credible defense of NATO's Central Region has been illuminated best by Edward Luttwak in his treatise on the "paradoxical logic" of war and peace.<sup>13</sup> His presentation of a general theory of strategy within a systematic framework of interrelationships between two "horizontal" dimensions (the different contentions of the adversaries) and five "vertical" levels (technical, tactical, operational, theater-strategic, and "grand strategy") is designed to explain "the tantalizing continuities and baffling contradictions that pervade the human experience of conflict." Because his purpose is to describe, not prescribe, Luttwak does not venture into applying his theory to provide specific recommendations for NATO's defense, other than pointing out the many obstacles involved. But in the process of illustrating or supporting his general theory, he demonstrates convincingly that many of the concepts proposed in recent years to improve NATO's defense posture (especially the various European notions of "non-provocative defense" or "defensive defense") are either counterproductive or unworkable. Without explicitly drawing the resulting conclusion, his analysis

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<sup>13</sup>Edward N. Luttwak, *Strategy – The Logic of War and Peace* (Cambridge, Mass.: Harvard University Press, 1987).

leaves little doubt NATO has no real alternative to its present strategy of Flexible Response.

To implement that strategy effectively, if we interpret this theory correctly, NATO's defense posture must be based on a delicate balance between too much and too little military strength; between dissuasion by denial (sufficient strength to defeat a conventional attack) and dissuasion by punishment (deliberate escalation to nuclear weapons); between defense in depth (politically unacceptable but militarily preferable), forward defense (a political necessity but a military weakness), and deep attack (militarily the limited results of interdiction raise questions of cost-effectiveness<sup>14</sup>). NATO's defense will inevitably be based on a set of dichotomies: between a purely defensive and an overly provocative military doctrine and force structure; between a one-sided reliance on high technology solutions and equally simplistic notions of cheap weapons in large numbers; and between forces in being, rapidly mobilizable reinforcements, and the sustainability of those forces.

On all counts, NATO's defense posture appears to be off balance. The only possible explanation is that NATO has never seriously examined how it would prosecute a war in the event deterrence failed. The NATO member nations have never agreed on specific military objectives in wartime; nor have they agreed upon the conventional force level and structure required by AFCENT to execute Flexible Response; nor have the NATO nations adopted an allied warfighting doctrine for combined operations at the operational level beyond tactical battles fought within each national corps sector. NATO's operational plans (the General Defense Plan and the Contingency Operations Plans Sequence) do not incorporate any decisive campaigns to terminate the war as soon as possible at the lowest level of destruction and violence. Those deficiencies must be corrected if NATO is to present a credible defense. Specifically, the seven nations that are committed to defend the Central Region must agree on specific allied military objectives, implement national force plans matched to the AFCENT force level and force structure required to meet those objectives, adopt an operational-level doctrine to guide combined operations

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<sup>14</sup>Without rejecting the various deep attack schemes circulating in NATO, Luttwak is skeptical about their cost-effectiveness, citing the high cost and fragility of those systems, possible Soviet countermeasures, and especially the relative invulnerability of the transportation links between the western Soviet Union and East Germany. Previous studies have suggested that even a 90 percent permanent destruction of that road and rail network would leave sufficient transportation capacity in place to sustain a full-scale Soviet offensive.

under Army Group and AFCEM command, and participate in the preparation of allied campaign plans that go beyond initial defensive responses to a Soviet attack. Otherwise, AFCEM's coalition defense can only detract from NATO's deterrence. The following comments address these requirements in more detail.

## Objectives

NATO's objective in war is to preserve the integrity and security of the NATO territory and to restore the international borders violated by the aggressor. This is more a statement of political aims than of military objectives, however. When it comes to military objectives, there is little consensus. The national views range from traditional warfighting aims of destroying the enemy's main force in order to achieve a decisive military victory (the U.S. view) to the more limited aims of maintaining a cohesive defense and preventing deep penetrations into NATO's rear in order to keep the devastation inflicted on NATO territory to a minimum, while rejecting any notion of cross-border counteroffensive operations (the view of most Europeans). Both of these viewpoints are unrealistic, however. The idea of annihilating the Soviet Union's main force is absurd because it would set off a nuclear war resulting in mutual suicide. The idea of proscribing NATO counterstrikes across the inner-German border is equally absurd because it leaves a sanctuary to Warsaw Pact forces, prevents NATO from threatening damage to the aggressor, and leaves the initiative to the aggressor, thereby assuring NATO's defeat.

As we have been arguing throughout this report, a conventional war between Warsaw Pact and NATO can only be a limited war: the extremely high lethality of the modern battlefield combined with the inability of the industrial base to replenish damaged equipment can only result in a war that is severely limited in time (counted in weeks, not months), probably also in space, and therefore in aims (according to Karl von Clausewitz). The Soviet aims have been articulated earlier in this volume. NATO's aims in such a war, if we accept the advice of an old warrior, Field Marshal Lord Carver, should be twofold: (1) to keep the war limited (conventional) as long as possible, and (2) to maintain freedom of action for own forces while limiting that of the opponent's.<sup>15</sup> This prescription echoes the longstanding admonishment by

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<sup>15</sup>Michael Carver, "Conventional Warfare in the Nuclear Age," Chapter 26 in Peter Paret (ed.), *Makers of Modern Strategy* (Princeton, N.J.: Princeton University Press, 1986).

Sir Basil H. Liddell Hart to NATO defense planners to "cure yourself of two fatal delusions: the idea of victory and the idea that war cannot be limited."<sup>16</sup>

These two broad aims need to be translated into operational objectives to be suitable for defense planning. The first aim requires a consensus on the level of military threat that NATO member nations are prepared to counter with conventional forces. This question has never been squarely addressed and resolved, notwithstanding the adoption of Flexible Response in 1967; however, leaving the enemy uncertain about NATO's response to armed aggression (which is advertised as one of the deterrence-enhancing characteristics of NATO's defense posture) is not a very promising strategy if NATO itself is uncertain. NATO should be capable of defeating a limited attack with conventional forces, using the threat of tactical nuclear weapons only as a deterrent to Soviet first use and as a means to dissuade massive troop concentrations. A limited attack in this context is defined as either a surprise attack by Soviet forces deployed in East Germany and Czechoslovakia (24 maneuver divisions) or a short-warning attack by reinforced Warsaw Pact forces on a scale similar to our scenario [50 maneuver divisions opposite AFCENT, not counting the Baltic Front opposite Allied Forces Baltic Approaches under the Allied Forces Northern Europe (AFNORTH)]. Against a full-scale Warsaw Pact offensive, involving the deployment of follow-on Fronts assembled through mobilization of its huge reserves (up to a total of 193 Soviet and 53 NSWP maneuver divisions for global war), NATO should be prepared to use theater-strategic nuclear weapons against military targets deep into Eastern Europe and the Western Military Districts of the USSR. This sets the level at which NATO is committed to keep a war limited.

The second aim, maintaining freedom of action and limiting that of the opponent's, translates into the military objective of paralyzing enemy action which is best achieved, citing Sir Liddell Hart, by seizing the initiative from the enemy and by applying offensive (or counteroffensive) fluidity of force (i.e., mechanized armored force) to dominate vital areas, but not to hold territory in the classic sense. This, in turn, requires air and ground mobile forces that can outmaneuver the aggressor,

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<sup>16</sup>Basil H. Liddell Hart, *Deterrence or Defense — A Fresh Look at the West's Military Position* (New York: Frederick A. Praeger Publishers, 1960).

which, in turn, require local air superiority. It also requires secure air, sea, and ground LOCs for reinforcement and resupply.

Adoption of these military objectives would set NATO on a clear course to resolving its conventional force requirement in the Central Region, to developing the operational-level combined doctrine that it lacks, and to preparing the contingency plans that are needed for prosecuting the war to a rapid termination, if necessary on Warsaw Pact territory, as outlined next.

### **Conventional Force Requirements**

Following the creation of Supreme Headquarters Allied Powers Europe in April 1951, NATO embarked on its first military assessment of the forces required to defend against a Soviet invasion. The conclusion reached in 1951 was that a covering force of 34 divisions (18 of which should be in place for immediate action) should suffice to check a surprise attack on the Central Region. Subsequently, this force plan was doubled in 1952 through planned reinforcements by mobilized reserve divisions to match a corresponding Soviet mobilization for a large-scale attack. The NATO force goals approved by defense ministers at the 1952 NATO Conference at Lisbon, Portugal, included a ground maneuver force of 96 divisions, 60 of which were earmarked for the Central Region, and 9,000 combat aircraft. This force level was deemed sufficient insurance against a Soviet attack involving 60 to 70 divisions against the Central Region, i.e., the maximum threat that seemed possible in the initial stage of war based on movement and supply calculations. This force goal for the Central Region (18 divisions in place, 16 active divisions for rapid reinforcement, and 26 reserve divisions mobilized and deployed within 24 days) was to have been reached in 1954 but was not achieved. Instead, after NATO's endorsement of tactical nuclear weapons in 1954, the force goal was reduced to 30 active divisions (in various states of readiness) as a sufficient force to support SACEUR's "firebreak" concept (1957) for avoiding the risk of escalation in the event of a limited attack. This concept subsequently evolved into Flexible Response (1967), but the conventional force goal was never achieved.

In 1960, 5 years after West Germany joined NATO and 1 year after the public announcement of massive troop cuts by General Secretary Nikita Khrushchev (2½ million men, reducing the Soviet active force structure to roughly 5.7 million), the force balance in the Central Region had improved considerably in quantitative

terms, but left much to be desired in qualitative terms. Sir Liddell Hart assessed the situation as follows:<sup>17</sup> against a surprise attack (20 Soviet divisions in East Germany), NATO had 21 divisions manned by short-term draftees but it needed only 13 divisions if manned by better trained regular personnel. Against a short-warning attack (40 divisions after 10 day preparations), NATO had 30 poorly trained divisions but it needed 26 regular divisions that are organized, trained, and equipped for maximum mobility and flexibility. Against a full-scale offensive (60 divisions after 30 days preparation), AFCENT's defense force of 40 divisions, achievable in 1 month mobilization under current arrangements, would be sufficient without use of nuclear weapons if better trained and equipped. In lieu of NATO's linear defense along the border with preplanned fallback on the Rhine, he advocated the concept of fluidity of force exercised by fully mobile and highly trained divisions, structured for both tactical and operational flexibility. On that basis, he calculated AFCENT's force requirement in a short-warning attack scenario at 26 maneuver divisions to meet both combat force and space conditions: a force ratio of 2:3 (defense to attack) would be sufficient to stop the attack (but only if the defender has sufficient flexibility and mobility) and a force density of 1 division per 40 km frontage (in open terrain) that is within a heavy division's defensive capability (20,000 men). Accordingly, those 26 divisions would be deployed as follows: 10 divisions forward along the inner-German border (the approximate 400 km frontage of relatively suitable terrain for a rapid advance by Soviet mechanized divisions), 3 divisions as a mobile screen along the mountainous border with Czechoslovakia, and 13 divisions (50 percent of the total force) as a mobile reserve for the entire region. His assessment was that this requirement could be reduced from 26 to 20 maneuver divisions if German civilian militia would be trained and equipped to man a deep network of defensive positions to delay the enemy's advance. He also pointed out that fundamental changes in force structure would be required to make his concept a reality: divisions subdivided into 4 to 5 "combat groups" capable of operating independently; lighter tanks and all vehicles on tracks for cross-country mobility; all infantry mounted on tracked vehicles, with the proportion that fights on foot reduced; and shortened logistics "tail" by reducing resupply requirements and switching to aerial resupply. To quote:

Since NATO is faced by a greatly superior-sized opponent, its chance of successful resistance vitally depends on being so mobile that it can

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<sup>17</sup>Basil H. Liddell Hart, *op. cit.*

outmaneuver the attacker. Small armor units must have utmost battlefield agility to shift from one fire position to another; divisions must be able to switch from one sector to another to deliver deep in-and-out counter strokes. The present armored force is gravely lacking in maneuvering flexibility: its long road-bound tail makes it almost as rigid as the shaft of a spear — it must be developed into a mechanized snake.

These ideas were ignored by NATO. Instead, the concept of Forward Defense was formally adopted in 1963, ruling out the previous fallback on prepared defense positions along the Rhine and blessing the notions of a linear battlefield, cordon defense, and positional warfare.

In the late 1960s, after France withdrew from NATO's integrated military command and after the NATO Military Authorities lost much of their influence on force planning and armaments planning, the determination of NATO's force goals became increasingly politicized. As we described in Volume 2, the force goals are now more based on national force plans than on a NATO military assessment of force requirements. Moreover, as the preceding paragraphs make abundantly clear, NATO's force requirements cannot be determined in isolation of how those forces would be used; the requirements depend as much on such factors as force structure, doctrine, equipment, and training, as on the threat force. This is frequently forgotten in the contemporaneous debates on the Warsaw Pact-NATO force balance.

Today, NATO faces a potential military threat in the Central Region that is far more lethal than that in 1960: a short-warning attack by 50 maneuver divisions (by our calculations) rather than 40, with much-increased combat power through modern equipment, better command and control, better training, improved air support, and an effective doctrine. Most of these divisions are fully combat ready and backed up by war reserve stocks sufficient to sustain military operations for 23 days without reliance on resupplies from the Western Military Districts of the USSR. Although the ground maneuver forces committed to AFCENT have increased likewise, with 24 division equivalents in place and 32 to 40 divisions by M + 10 (depending on French participation), NATO has made little or no progress over the past two decades in correcting the "fatal flaws" highlighted by Sir Liddell Hart. Close to 100 percent of the combat force continues to be committed to a static Forward Defense; NATO's doctrine of Active Defense continues to emphasize positional warfare and to ignore the requirement for agility, fluidity of force, and maneuver warfare; and with the exception of the American, German, and French contingents, the national forces continue to lack the mobility required to survive and



win on this type of battlefield. In one respect, NATO's situation has actually grown worse since 1960, and that is the issue of interoperability. Today, after decades of indifference to rationalization, standardization, and interoperability, NATO military officials acknowledge it is impossible to cross-attach divisions from one corps to another of different nationality. Yet, lateral reinforcement among national corps sectors is critical to NATO's defense. Needless to say, the lack of force interchangeability increases the overall force level required compared to that of a truly integrated force faced with the same military threat.

By 1992, if Gorbachev succeeds in completing the force reductions that he announced in his speech to the United Nations on 7 December 1988, the potential threat of a short-warning attack will have been reduced to 44 divisions maximum (or remain at 50 divisions after 5 additional days of preparation) and those divisions will have lost much of their offensive combat power through a 40 percent reduction in tanks and a 20 percent reduction in artillery.<sup>18</sup> For example, the announced force restructuring would reduce the number of tanks in Tank Divisions from 328 to 260 and in Motor Rifle Divisions, from 270 to 160. It would also introduce a new type of "defensive division," with 40 tanks designed to fight from fortified positions only. Clearly, NATO's current division count for the Central

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<sup>18</sup>Gorbachev's "Christmas gift" to the West was the unilateral implementation of the conventional force reductions previously proposed in the 1986 "Budapest Appeal" (see Volume 4). The specific reductions to be implemented by 1991 are as follows: overall troop reduction of 500,000 men, including 50,000 from Soviet forces in Eastern Europe by withdrawing and disbanding 6 Tank Divisions (1 from Hungary, 1 from Czechoslovakia, and 4 from East Germany); and thinning out the equipment holdings in the Western Theater by a 10 percent cut (800) in combat aircraft, a 23 percent cut (8,500) in artillery pieces, and a 30 percent cut (10,000, including those of the 6 disbanded Tank Divisions) in tanks. What compensation he had to offer the Soviet military establishment to gain support for this decision, ostensibly approved by the Politburo, remains a deep secret. According to the Central Intelligence Agency, Gorbachev could count on only 4 out of the 12 voting Politburo members in support of this unilateral force reduction so that the collective vote in favor must have been bought, perhaps with a promise of enhanced production of modern military equipment. According to the same source, Soviet military spending began to increase again in 1986 (after leveling off in the mid- to late-1970s) notwithstanding official Soviet announcements of reductions in their military budgets. Because the prices for goods in their economic system are arbitrary, only the future will show whether "reduced military budgets" translate into less or more military production. For a review of Soviet military spending trends and the possible bargain between Party and Army on military spending restraints now for the promise of a qualitative "leap forward" later, see Abraham S. Becker, *Ogarkov's Complaint and Gorbachev's Dilemma: The Soviet Defense and Party-Military Conflict*, Report R-3541-AF (Santa Monica, Calif.: The RAND Corporation, Dec 1987).

Region is more than enough insurance against that threat, but only if the above shortcomings are corrected.

## **Doctrine**

Doctrine is defined as "Fundamental principles by which the military forces guide their actions in support of national objectives. It is authoritative but requires judgment in application." It essentially spells out how forces will fight in wartime. Though the process of developing and revising doctrine may differ from one nation to another, and from one Military Service to another, by the nature of the task it is based on mission area analyses that identify requirements for doctrine, training, organization, and materiel in a coordinated way. A new concept, for example, resulting from threat analysis or technology advances, frequently initiates this iterative process of mission area analysis and coordinated development of doctrine, training, organization, and materiel; and this is the way we use the term "concept" – as a precursor of doctrine. The term "combined doctrine" is used for the employment of forces of two or more nations in coordinated action toward a common objective. The term "joint doctrine" refers to the employment of forces of two or more Military Services of the same nation in coordinated action toward a common objective.

Because the different national forces must operate together in wartime, NATO has devoted considerable effort to harmonizing national tactical doctrines and establishing common principles of combat, common terminology, common procedures, and common doctrine for combined actions. Most of this work is carried out by "working parties," composed of national representatives from the 14 NATO countries with a military contribution to NATO's defense (i.e., all 16 nations except Iceland and Luxembourg), under the aegis of the three Service Boards of the Military Agency for Standardization (MAS). The results of those efforts are documented in standardization agreements and allied publications that are ratified by nations to indicate their acceptance and intent to comply, subject to stated reservations. For example, in the tactical doctrine area, the following Allied Tactical Publications (ATPs) describe NATO-agreed doctrine for key mission areas in wartime:

- ATP-6, Allied Doctrine of Mine Warfare
- ATP-8, Doctrine for Amphibious Operations

- ATP-27, Offensive Air Support Operations
- ATP-28, Allied Anti-Submarine Warfare Manual
- ATP-31, NATO Above Water Warfare Manual
- ATP-33, NATO Tactical Air Doctrine
- ATP-34, Tactical Air Support of Maritime Operations
- ATP-35, Land Force Tactical Doctrine
- ATP-40, Doctrine and Procedures for Airspace Control in the Combat Zone
- ATP-41, Airmobile Operations
- ATP-42, Counter Air Operations
- ATP-44, Electronic Warfare in Air Operations
- ATP-49, Use of Helicopters in Land Operations
- ATP-51, Electronic Warfare in the Land Battle
- ATP-52, Land Force Combat Engineer Doctrine.

Without trying to denigrate these efforts or underestimating the value of the results achieved thus far in doctrinal harmonization, gaps remain in the doctrinal area that must be filled to achieve the level of interoperability of forces needed for a coalition defense. Three of those gaps are discussed in the following paragraphs.

First, NATO tactical doctrine as specified in ATP-35 is portrayed as combined doctrine for brigade level and above. In actuality the national implementations of that doctrine are far apart. And because national doctrine spawns force structure, equipment, and training, those differences continue to impede true interoperability of NATO land forces. For example, forces in the Dutch and Belgian corps sectors probably would conduct an "area defense," but in a defensive posture (in the Clausewitzian belief it is the more effective form of war) until the attacker's strength has been successfully degraded so that counterattacks can be launched.<sup>19</sup> In contrast, the British force in its corp sector would conduct a slightly more aggressive form of Active Defense, "aggressive delay," by using mobile armored units in its rear for counterattacks before the enemy's force has exhausted itself. The German forces

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<sup>19</sup>See, for example, the views expressed by a Dutch Army officer, Colonel Arie van der Vlis, "AirLand Battle in NATO - A European View," *Parameters*, Vol. XIV, No. 2, Summer 1984, pp. 10-14.

would conduct "mobile defense" with counterattacks earlier and further forward than in the British concept, and in the defense of their homeland they would fight aggressively for every inch of territory to be lost. The U.S. forces would most likely execute AirLand Battle and seize the initiative immediately with maneuver and counterstrokes. In the process, AFCENT's Forward Defense forces would create large open flanks in the various sectors that would surely be exploited by the enemy. Or worse, the enemy's offensive would exploit those differences at the outset as suggested by our scenario. Yet, all these national doctrines are compatible and consistent with ATP-35. Clearly, the notion that NATO has a combined tactical doctrine is a delusion in fact and the ramifications in wartime would be aggravated by the lack of command authority of NATO Army Group Commanders over those forward brigade- and division-level battles. Thus, NATO needs to persist in further harmonizing national tactical doctrines and this harmonization must move combined doctrine from Active Defense in the direction of maneuver-oriented defense, which elevates the importance of our next point.

Without an operational-level doctrine, NATO commanders would experience difficulty in preparing campaign plans and even greater difficulty in executing them. Yet, without seizing the initiative and conducting operational-level maneuvers to place NATO strength against enemy weakness, NATO would be forced to fight a series of tactical battles in the various corps sectors, battles that it would lose against enemy superior strength on the main strike axes. Fortunately, there are indications that NATO is beginning to recognize its predicament.

Even though AirLand Battle doctrine was not welcomed in NATO circles when the U.S. Army briefed the allies in 1982 in an attempt to revitalize NATO's conventional defense, the validity of its theoretical basis and tenets has been well recognized by NATO Commanders. In the ensuing years, a variety of operational concepts emerged in Europe that resurrected the operational level of warfighting. Those concepts evolved from the recognition that NATO's defense in the Central Region depends on seizing the initiative, on the regrouping of forces, and on the employment of operational reserves (under Army Group as well as AFCENT command) in counteroffensive operations. Those operational concepts, named after their originators, are summarized in Table 5.

The late General Ferdinand M. von Senger und Etterlin (former Commander-in-Chief AFCENT, or CINCENT for short) advocated the pooling of all Central

**TABLE 5**  
**NATO'S EMERGING OPERATIONAL CONCEPTS**

Concept	Focus	Forces	Evolution				
			1983	1984	1985	1986	1987
Von Senger	Region (AFCENT)	Airmobile reserves		FAR is created. BAOR airmobility trials	4th (FR) Airmobile Division created		24th (BR) Airmobile Brigade created
Bagnall	Army Group	Armored reserves	I(BR) Corps FTX <i>Eternal Triangle</i>	Formulation of "Bagnall concept"	New NORTHAG concept	I(BE) Corps FTX <i>Crossed Swords</i>	NORTHAG FTX <i>Certain Strike</i>
Fricaud-Chagnaud	Corps	Airmobile and light armored reserves	I(FR) Corps FTX <i>Moselle 83</i>  ( <i>Lightning Force</i> trials)	FTX <i>Damocles</i>  (Airmobile brigade trials)	FTX <i>Fartel 85</i>  (first FAR FTX)		II(GE) Corps FTX <i>Bold Sparrow</i> (first FAR FTX in FRG)

**Source:** Diego A. Ruiz Palmer (NATO Studies Center, BDM Corporation, Washington, D.C.), "Countering Soviet Encirclement Operations: Emerging NATO Concepts," *International Defense Review*, Nov 1988, pp. 1413 - 1418.

**Note:** BAOR = British Army of the Rhine; BE = Belgian; BR = British; FAR = Force d'Action Rapide; FR = French; FTX = Field Training Exercise; GE = German.

Region helicopter assets into an airmobile reserve corps of eight airmobile divisions (aggregate strength of 1950 helicopters) to be employed as counteroffensive forces. General Sir Nigel Bagnall (former Commander NORTHAG) sought to shift the emphasis to maneuver warfare and the employment of strong armored reserve forces to counterbreakthroughs or to launch counterattacks. His concept envisaged regrouping of forces to provide NORTHAG with an operational reserve of three divisions [not counting III(US) Corps] that would operate across corps boundaries. In order to create that force from current assets, he advocated stretching Forward Defense forces and accepting a more "elastic" defense except for selected vital areas. General Georges Fricaud-Chagnaud (Chief, French Military Mission to CINCENT) saw the establishment of airmobile units as an opportunity to improve the speed and effectiveness of French participation in the defense of West Germany and advocated the concept of a rapid intervention force, composed of air and ground mobile units, to intercept fast-moving OMGs in the CENTAG area.

The Bagnall concept was adopted in 1985 as the new operational concept for NORTHAG by all five nations involved in its defense (including the United States) and has been described as follows:

The revised concept places greater emphasis on the selection and defence of vital areas; on cooperation between ground and air forces; on tactical flexibility and mobility; and on the employment of reserves. Indeed, a key element of the plan is a considerable strengthening of the armoured reserve forces available to NORTHAG. It is important to recognise that the concept does not mark any change in NATO's essentially defensive posture; nor does it imply an abandonment of the principle of forward defense, which remains a fundamental tenet of NATO strategy. But it does recognise that force improvements permit the adoption of a more mobile tactical concept. Static defense can lead only to a war of attrition, while the new concept would allow the defenders to seize the initiative from the aggressor, giving the Alliance a much better chance of defeating the enemy, rather than merely delaying him.<sup>20</sup>

The recent evolution and field testing of these operational concepts is a most promising sign of NATO's determinatic (on the military side) to improve its conventional defense posture. What remains to be done, now that the "lessons learned" from field training exercises have been absorbed, is to transform those concepts into a NATO combined operational-level doctrine in order to influence national defense plans and doctrine, including force restructuring, equipment modernization, and training. The MAS Army Board has taken the first step in that direction by completing a paper entitled "Operational Level of War" that was published as an annex to the NATO Foreword in Change 3 to ATP-35(A) in late 1988 (hence for information purposes only, not requiring national ratification). The future, at this stage, is uncertain. The U.S. Army's view is that a joint-Service body needs to be established, equal to the MAS Service Boards and reporting directly to the Military Committee, to write that combined operational doctrine. This proposal has received little support, either nationally (the U.S. Joint Chiefs of Staff have not been supportive of the idea) or internationally. Clearly, the Military Committee needs to task an appropriate body to write the NATO combined operational doctrine that is so sorely needed. We anticipate that such a NATO doctrine in many respects would resemble U.S. Army's AirLand Battle doctrine, simply because it is the right

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<sup>20</sup>Extracted from: *The United Kingdom Statement on the Defence Estimates* (London: Ministry of Defense, 1986) as cited in Diego A. Ruiz Palmer, "Countering Soviet Encirclement Operations: Emerging NATO Concepts," *International Defense Review*, No. 11/1988, pp. 1413-1418. The latter article provides further information and source references for the emerging operational concepts described in the text.

doctrine, even though the peculiar circumstances in AFNORTH and Allied Forces Southern Europe would place a greater emphasis on the naval support role to the air-land battle. Thus, we refer to it as a NATO-style adaptation of AirLand Battle, without intending to denigrate original European contributions to the formulation of that emerging NATO doctrine. A compatible, if not common, operational doctrine would also help alleviate the disharmony among national tactical doctrines.

The third concern is NATO's doctrinal dilemma in integrating air and ground operations. The traditional view holds that centralized apportionment and allocation of tactical air assets is necessary to reap maximum effectiveness of the air effort. NATO's command and control structure reflects this view. On the other hand, Army Group and corps commanders cannot prepare campaign plans without being certain of the level of offensive air support they will receive. Responsive support by the Air Commander to the needs of the various Army Group and corps commanders conflicts with the notion of centralized control. This dilemma has been discussed in the military journals for several years but to our knowledge a satisfactory solution has not yet been found. In the process of formulating its operational doctrine, NATO needs to resolve this problem. The long-term solution may well require reallocation of traditional missions and roles between air and ground forces.

### **Operational Planning**

In the absence of an operational-level doctrine, the only link between NATO strategy (as specified in NATO Document MC 14/3, "Strategic Concept for the Defense of NATO," which articulates Flexible Response) and tactics are the war plans of NATO commands. Although classified, those plans have traditionally focused more on the transition from peace to war than on the prosecution of war and they are oriented more to fighting tactical delaying battles in each corps sector than conducting counteroffensive operations. Presumably, this orientation is now changing as a result of the emerging operational concepts described above.

Let us return to the assumed scenario to illustrate some of the requirements for a credible defense and to identify some of the precepts on which NATO needs to build its operational-level doctrine and war plans.

### ***Accept Possibility of Strategic Surprise***

The Soviet Union can be expected to place the highest priority on surprise if it launches an attack against NATO. At the strategic level (intent to launch attack), their efforts at concealment may not be foolproof but the warning indicators probably would be ambiguous. Strategic warning would most likely not translate into a lengthy preparation time for NATO. Thus, NATO should not plan for a minimum of 10 days preparation time as currently assumed. Although NATO's war plans, besides the General Defense Plan, include a series of fallback positions as a contingency, those are not the only planning implications to be drawn from this principle. For example, AFCEM should have standing operating procedures for the handoff of pre-positioned U.S. equipment to European reserve forces that can be mobilized faster than some of the U.S. forces, for which that equipment is intended. (Between 20 and 25 percent of that equipment may be earmarked for round-out brigades of deploying Active Army divisions.) Such procedures do not currently exist; they should be developed now in anticipation of such a contingency as they cannot be improvised during the chaos of war. Such a process should also be exercised during peacetime training exercises. Similarly, the transition to alternate LOCs would have to proceed much faster and earlier than current plans and procedures permit. The NORTHAG LOC through Rotterdam could be interdicted in the first few days and the CENTAG LOC through Antwerp probably would be disrupted, if not destroyed too. Arrangements need to be made to transfer the various LOCs for reinforcements and supply at the outset of the war, not after their interdiction.

### ***Minimize Operational and Tactical Surprise***

The Soviets would most likely try to conceal the timing, strength, direction, and scope of the offensive (operational surprise) as well as their force deployment, main axes of attack, warfighting tactics, and any new weapons capabilities they may possess (tactical surprise). NATO's current reconnaissance and surveillance capabilities are limited. Satellites and aerial reconnaissance assets are vulnerable and their communications links are subject to countermeasures. Ground surveillance radars are vulnerable and have limited range. NATO needs to field a more survivable "see deep" capability for the entire region to reduce operational surprise. It also needs to institute better means to share intelligence and surveillance data among the allied corps. On the ground, the primary means to



reduce tactical surprise remains the covering force deployed along the borders. The capabilities, readiness condition, and training of those units vary significantly among the national corps. The U.S. corps deploy armored cavalry regiments that are organized, equipped, and trained for the covering force mission and in high readiness condition; the German corps deploy armored mobile units that supplement their border troops; the other corps deploy battalion-sized units with limited armor, fire power, and mobility that are not suitable for the mission and are not fully ready around the clock. Yet, the peacetime mission of the covering force is as important as that of the high- and medium-air defense units deployed throughout the FRG and under NATO command in peacetime. Concerns about tactical surprise could be alleviated significantly by creating a NATO Ready Covering Force, under NATO command (delegated to the CENTAG and NORTHAG Commanders) in peacetime, meeting Allied Command Europe standards and subject to its tactical evaluations.<sup>21</sup> Such a force would improve readiness and capabilities of armored cavalry units assigned the covering mission for the entire region; signify NATO's seriousness about forward defense; foster NATO coherence; and give a peacetime responsibility and authority to the Army Group Commanders thereby enabling them to play a more active role in NATO force planning. It would also streamline the process of transition to war. This requirement implies a net addition to NATO force structure because national corps commanders still would require a covering force under their operational control.

### ***Disrupt Enemy Plans at the Outset***

The traditional mission of a covering force is reconnaissance. Counter-reconnaissance, however, appears to be neglected in current NATO doctrine. The experience gained from simulated combat at the U.S. Army's National Training Center indicates that the counterreconnaissance mission is crucial for the defending force against a Soviet-style attack. Aggressive execution of that mission would provide the first opportunity for NATO ground forces to disrupt the aggressor's plan. That opportunity needs to be seized by forceful counterattacks aimed at the forward

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<sup>21</sup>The idea of a NATO covering force, insofar as we know, was first suggested by Phillip Karber in the 1985 International Institute Strategic Studies (IISS) Annual Conference held in West Berlin, September 1985; see Phillip A. Karber, "NATO Doctrine and National Operational Priorities: The Central Front and The Flanks, Part I," in "Power and Policy: Doctrine, the Alliance and Arms Control, Part III," *Adelphi Papers* 207 (London: International Institute for Strategic Studies, Spring 1986).

detachments whose mission is to identify weak points in NATO's Forward Defense and to infiltrate while avoiding decisive engagements. Countering the forward detachments and denying the intelligence they seek on NATO deployments is the first step toward disrupting the Warsaw Pact advance and causing paralysis. For those counterattacks to be successful, two types of capabilities need to be developed. First, the armored cavalry units must have the mobility, firepower, and training to execute swift flank attacks against the forward detachments that are battalion-, regiment-, or division-sized; they must also have fire support from forward assets in each corps.<sup>22</sup> Second, the terrain needs to be modified to channel or impede onward movement of forward detachments, thereby denying them the mobility they need to escape from being destroyed. This could entail supplementing available terrain features with field fortifications in front of General Defense Plan positions, including infantry strongholds, tank ditches, and mine fields; those that cannot be put in place at a moment's notice (i.e., through explosives or scatterable mines seeded via rocket launchers or helicopters) should be installed in peacetime. NATO needs to convince the FRG Government to put political sensitivities on this subject aside and accept such peacetime defense preparations on its soil where needed. In *peacetime*, infantry battalions should be rotated from rearward garrisons into these forward stronghold positions with the same vigilance mission as the covering force. In *wartime*, those infantry strongholds with adequate antitank weapons and artillery support would channel or delay the enemy's advance so the covering force can successfully execute flank attacks on the enemy's forward detachments. This concept would improve NATO's defense preparedness immensely; it would provide a tangible peacetime mission to light infantry, including "over watch" of field fortifications; and in wartime it would enable forceful execution of the counterreconnaissance mission.

### ***Break Up Enemy Mass***

NATO's forward defenses probably would be no match for the sheer size and firepower of the first-echelon armies. NATO needs to recognize this fact. Specifically, NATO and national corps commanders should not rely upon much close air support at this critical time because most of NATO's tactical air will be directed at defeating the Warsaw Pact's air operation. To reduce the tremendous impact of

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<sup>22</sup>For information on the evolving U.S. counterreconnaissance doctrine see: COL John R. Landry and LTC Garrett R. Fonda, U.S. Army, "Countering Soviet Forward Detachments," *Military Review*, Jun 1987.

the enemy's shock action (i.e., the compound effect of "integrated fire destruction" and rapid movement), NATO's Forward Defense forces must break up enemy mass by fighting battles in depth, attacking at distance with maximum firepower, including artillery, rockets, missiles, attack helicopters, and tactical air strikes. This is not in conflict with maneuver warfare; maneuver and firepower are complementary in battle and without sufficient firepower matched to enemy capabilities, maneuver can only delay, not avoid, defeat. As described in Volume 3, NATO's existing counterfire capability is inadequate against the threat force. Thus, firepower "plugs" need to be added to the current force structure, particularly in the first-priority force packages for rapid reinforcement, just like high and medium air defense units. For example, in the U.S. Army, a "sustainment brigade" was originally included in the conceptual studies "Division 86" and "Army 90" but subsequently deleted because of cost and manning constraints. There are, however, about 20 combat brigades in the Army National Guard force structure with no clear mission other than forming contingency divisions or serving as individual replacements in wartime. These brigades could be utilized much better as separate firepower plugs in support of Forward Defense at the most threatened sectors. By pre-positioning their equipment close to planned deployment sites, and putting them at the top of the time-phased force deployment list, they would provide a most-significant contribution to Forward Defense. Similar efforts are required from the NATO allies in the Central Region.

#### ***Retain Maximum Flexibility and Operational Mobility***

Even with the above initiatives, the enemy's advance could not be stopped in those sectors where its forces concentrate to penetrate along selected main axes of advance. To prevent infiltrations from becoming penetrations, threatened sectors should be reinforced immediately from neighboring sectors. Instead of withdrawing in-sector in accordance with the precepts of Active Defense, mobile reserve units should conduct flank attacks on the first-echelon divisions that are in the process of penetration. The enemy would likely try to prevent such lateral maneuvers from happening by "fixing" Forward Defense forces in selected corps sectors and concealing its main axes of advance. The implication is that those NATO forces being fixed by Warsaw Pact forces should not fight an Active Defense battle, but seize the initiative immediately by counterattacks across the border to force the enemy to redeploy its forces and so regain the operational flexibility required for

lateral support. Such counterattacks would be at brigade and division level, i.e., up to approximately 50 km deep, and be specifically designed to disrupt the enemy's plan, not to hold territory: execution of basic maneuver theory. When the objective is achieved (i.e., the enemy force is redeployed, some enemy units annihilated, and targets of opportunity destroyed), the counterattacking mobile force will return either to its own sector or to a neighboring threatened sector for rear attack against enemy formations attempting breakthrough. The counterattack forces thus operate as raiding forces and should be equipped, trained, and supported accordingly. Their objective is limited: *retain operational mobility for NATO defense forces*. At this stage of the war, it would be unrealistic to think of corps-level units conducting an operational-level deep attack into Eastern Europe.

### ***Counterpenetrations by Enemy Raiding Forces***

Enemy penetrations of NATO forward defenses should still be anticipated through the combined operations of raiding detachments, air assault troops, and OMGs. The Soviet deep battle plan consists of a telescoping system of exploitation designed to insert high combat power into NATO's rear. It relies on (1) the identification of gaps in NATO's Forward Defense line or the creation of such gaps by first-echelon divisions on D-Day; (2) the exploitation of such gaps by division-size OMGs on D + 1, seeking to encircle Forward Defense units, to deploy raiding groups further to the rear, to destroy advancing reserve units in meeting engagements, or to conduct parallel pursuit and destroy withdrawing forces; (3) the reinforcement of such actions by second-echelon divisions from first-echelon armies on D + 2 or D + 3; and (4) the insertion of corps-size OMGs from second-echelon armies on D + 5 to seize defense lines in the rear as well as key economic/political objectives. NATO must be prepared to prevent penetrating forces from encircling NATO's Forward Defense units and follow-on echelons from exploiting the gaps that have been created. This requires a defense in-depth, with an operational reserve in place and combat ready at the latest by D + 1 and repositioning plans for units not in contact to get into the fight, including flank attacks by mobile reserves in neighboring sectors. The operational reserve is critical to NATO's defense. There is a general consensus that a three-division corps under command of each Army Group Commander (NORTHAG and CENTAG) would fill the immediate need if backed up by an AFCENT mobile reserve. Part of each corps should be airmobile, the rest should have high ground mobility and potent firepower. Finding the resources for this operational reserve has

been a longstanding problem. However, only a portion needs to be active force (e.g., the airmobile division, and one brigade of each armored division), with some of the manpower and equipment obtainable from thinning out forward-deployed heavy units in difficult terrain where armor cannot be fully utilized; some of the reserve force could be provided by German Territorial Army units or the ready reserve of other continental armies, possibly using U.S. pre-positioned equipment in NORTHAG (with those units relieved when U.S. reinforcements arrive). The CENTAG reserve would be an obvious task for the French. Regardless of the mechanics, NATO needs to resolve this issue rather than betting its survival exclusively on high technology for FOFA and Offensive Counter-Air.

The primary missions of the Army Group operational reserves at this stage of the war (D + 1 through D + 4) would be to destroy enemy raiding forces in meeting engagements and to conduct counterpenetration operations to relieve Forward Defense units that are being penetrated or encircled. At the next stage (starting at D + 4 or D + 5, see below), their missions would also be to conduct counterattacks to recapture vital ground lost to the enemy and counterstrokes to seize the initiative and attack enemy main forces.

#### ***Prepare for Rear Battle***

In the event NATO's counterpenetration operations are insufficient to block enemy penetrations from advancing further into NATO's rear, national corps and NATO Army Groups should be prepared to fight rear battles in the corps support areas. NATO plans and wartime procedures are currently not designed to cope with this contingency. There is no commander in the rear, either in the national corps sectors or further to the rear in the regional Communications Zone, with the authority and resources to synchronize rear battle operations. This would require a tactical operations center in each rear corps zone, surveillance and communications gear, frequency priorities in communications networks, and combat troops with high mobility and firepower — nothing is provided today. The problem is complicated by the variety of forces in the corps rear zone from different Military Services and nationalities, with different missions and chains of command, and different operating procedures. NATO must face up to this requirement rather than ignoring it and set aside the assumption that military police units, with assistance from

combat service support units, can cope with this mission. At the least, an AFCENT operational reserve of six to eight divisions would be required by D + 3.

### ***Take the Counteroffensive***

By D + 4, the battlefield probably would be highly nonlinear. In some sectors, NATO forces would be at General Defense Plan positions fighting battles to fix or encircle enemy forces; in a few sectors, enemy spearhead formations would have broken through to a depth of 100 km (NORTHAG) or 50 km (CENTAG) but blocked by operational mobile reserve units; and in other sectors infiltrations would have taken place that have not yet become penetrations while under heavy flank attacks from neighboring corps sectors. Even with the battles in NATO's rear still in progress, NATO should take the counteroffensive; it should not wait until the situation has "stabilized" — an event that may never occur. The objective of this counteroffensive should be to encircle the enemy's first-echelon armies before the second-echelon armies arrive to reinforce the offensive. That arrival, probably planned for D + 5, would most likely be delayed by NATO's FOFA effort but could not be prevented. For this counteroffensive to be effective it must identify and isolate enemy weakness and attack by forceful maneuver — the essence of AirLand Battle doctrine. Reconnaissance and surveillance ("see deep") capabilities are key to this mission. Enemy weak points include its LOCs supporting the first-echelon armies on NATO territory. The ideal location to initiate this operational-level counter-stroke would be from Jutland/Schleswig-Holstein, but with current force dispositions this territory would probably be lost to NATO by D + 3 and would be extremely difficult to retake. Thus, NATO should rethink the Forward Defense of that area. Perhaps Allied Land Forces Schleswig-Holstein and Jutland (LANDJUT) should be put under AFCENT rather than AFNORTH command and the Danes challenged more aggressively to carry a fair share of their own defense. It also should be

reinforced.<sup>23</sup> Options include additional German home defense brigades (above the two already committed), restationing the Canadian brigades (instead of consolidating that force in CENTAG's rear), requiring the Dutch to contribute several brigades of their reserve, increasing the UK commitment, or dedicating a U.S. Marine Expeditionary Force. Other locations from which to initiate this counter-stroke would be those corps sectors that have maintained their General Defense Plan positions, such as the German and U.S. corps. Simultaneously, at the tactical level, NATO's operational reserve units would continue their counterattacks to force the enemy to redeploy or withdraw its spearhead forces that are deep into NATO territory. In the process, the enemy's mobile groups would be annihilated while the first-echelon main force either would have to fight its way out or be destroyed.

### ***Plan for Reconstitution of Forces***

Informed military observers speculate that the operational tempo and devastating lethality of this war would leave both sides exhausted after the first spasm lasting 6 days. NATO ground forces would have suffered heavy attrition, especially in materiel, and would not be able to cope with the advancing second-echelon Warsaw Pact armies without reinforcement. Thus, they would need to be reconstituted and reinforced by D + 7 to prepare for the next battle.

### ***Bring the Battle to Enemy Territory***

Depending on the strategic reserve that NATO could muster by approximately D + 10, the best opportunity to launch a deep attack would be when the second-echelon armies of the first strategic echelon advance to contact for the second battle, repeating the cycle of the first one. The objective of NATO's deep attack should be to disrupt enemy contingency plans, to paralyze the enemy, to isolate its force by cutting off its LOCs, and to terminate the war on favorable terms to NATO before

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<sup>23</sup>The NATO Commander Allied Forces Baltic Approaches (a Danish general), the chain of command over LANDJUT, has for many years been concerned about the weak defense of Jutland/Schleswig-Holstein. His repeated pleas to get a U.S. pre-positioning of materiel configured to unit sets division permanently assigned to him are, of course, unrealistic because U.S. Army in Europe force reductions are unavoidable in the next few years as the European NATO member nations should be well aware by now. The U.S. 9th Infantry Division is designated for rapid reinforcement to SACEUR strategic reserve, with first priority LANDJUT; even though it is more rapidly deployable than a heavy division and its support requirements (ammunition, fuel, and spare parts) have been prestocked in theater, it will arrive too late in our scenario. Moreover, LANDJUT's need is for more heavy armor, not light infantry — see Ib Faurby, "Denmark: No Simple Formula for Security," *NATO's Sixteen Nations*, Dec 1988, pp. 38 — 44.

further devastation is wrought by a Soviet decision to deploy its second- and third-strategic echelons. This is precisely the type of operation typically highlighted in discussions of deep battle concepts under AirLand Battle doctrine; the forces that are available to execute it, however, are limited. Furthermore, the scale of this operation would realistically consist of no more than a few divisions cutting through East Germany at a depth of no more than 100 to 120 km; not Army Groups landing in Italy and the Baltic coast to conduct a pincer movement through Hungary and Poland to cut off the second-strategic echelon, as presented in popular descriptions and U.S. Army War College student papers. This operation, even on a modest scale and at shallow depth, could bring the war to a rapid termination once the aggressor recognizes his offensive has failed to achieve the limited objectives set for the first-strategic echelon.

## **NATO REFORMS**

The four notions explored in the previous section would put NATO on a sound course to developing a credible conventional defense: (1) adopting unambiguous military objectives for conventional defense, (2) matching NATO force goals and national force plans with the military requirements to meet those objectives, (3) developing combined doctrine at the operational and tactical levels that shifts the emphasis from positional to maneuver warfare, and (4) preparing defense plans that are based on realistic scenarios, not foolish fancy.

Implementation would require fundamental reforms in NATO policies and procedures and in the force structure of NATO's ground forces. Consequently, reaching a consensus on and acceptance of those reforms would be extremely difficult. Doctrinal reform, by its very nature, is a slow and complex process and is merely the first step in preparing armies to fight.

These are the key reforms needed:

- The need for an allied combined doctrine for echelons above corps, defining, among others, the operational level of warfighting.
- The shift from Active Defense tactical doctrine to a NATO adaptation of AirLand Battle operational and tactical doctrine.
- The acceptance of "interoperability of forces" as a top-priority requirement rather than a long-term goal.



- The establishment of peacetime responsibilities of NATO Commanders and their wartime command and control authority beyond "coordination" of national corps commanders.
- The introduction of combined force integration, starting with a NATO Ready Covering Force in peacetime and ultimately leading to multinational corps with force components based on role specialization.
- The rethinking of current tables of organization and equipment of maneuver divisions and corps that are not properly designed for the required missions: divisions lack the mobility required, cannot fight around-the-clock, and are too large; corps do not have sufficient depth and lack the assets to influence divisional battles, yet are virtually immobile.

As an example of the latter reform, the heavy division organized under the U.S. Army of Excellence force structure would need to be reduced by several thousand positions, which would permit fitting one more division in a corps without a manning increase, resulting in more needed depth of the corps (two divisions back instead of one) and providing the corps commander with the resources to influence the divisional battles. But designing the force optimally for maneuver warfare is a complex challenge; one which is better left to another study.<sup>24</sup>

## EPILOG

This volume has identified the major weaknesses in NATO's conventional defense posture based on the characteristics of plausible scenarios for a Soviet assault in the event deterrence fails. It has explained the operational-tactical reforms that are needed to eliminate those weaknesses, thus enhancing NATO's deterrence. Those reforms consist of fundamental shifts in planning NATO's defense: from positional defense to maneuver warfare, from the tactical to the operational level of warfighting, and from national corps to a regional combined force through better force integration. In short, the reforms mean the adoption of a NATO-style AirLand Battle concept. Implementation of these reforms will be a formidable task and political realities will determine the pace at which they can be implemented. These reforms will also require equally fundamental changes in

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<sup>24</sup>The most promising ideas on restructuring the heavy division and corps come from the National War College, with designs for "Maneuver-Oriented Division 1995" at approximately 12,500 strength and "Maneuver-Oriented Corps 1995" at 109,000 – the same corps slice as the Army of Excellence force structure but containing four rather than three divisions. To what extent these ideas receive favorable consideration by Training and Doctrine Command is unknown to us.

NATO logistics policy and national logistics capabilities. That is the subject of Volume 6.